

POLY GIM

SIMPLICITY • PRECISION • SPEED • DURABILITY • STABILITY

DIAMOND
CSL

走心式CNC自動車床

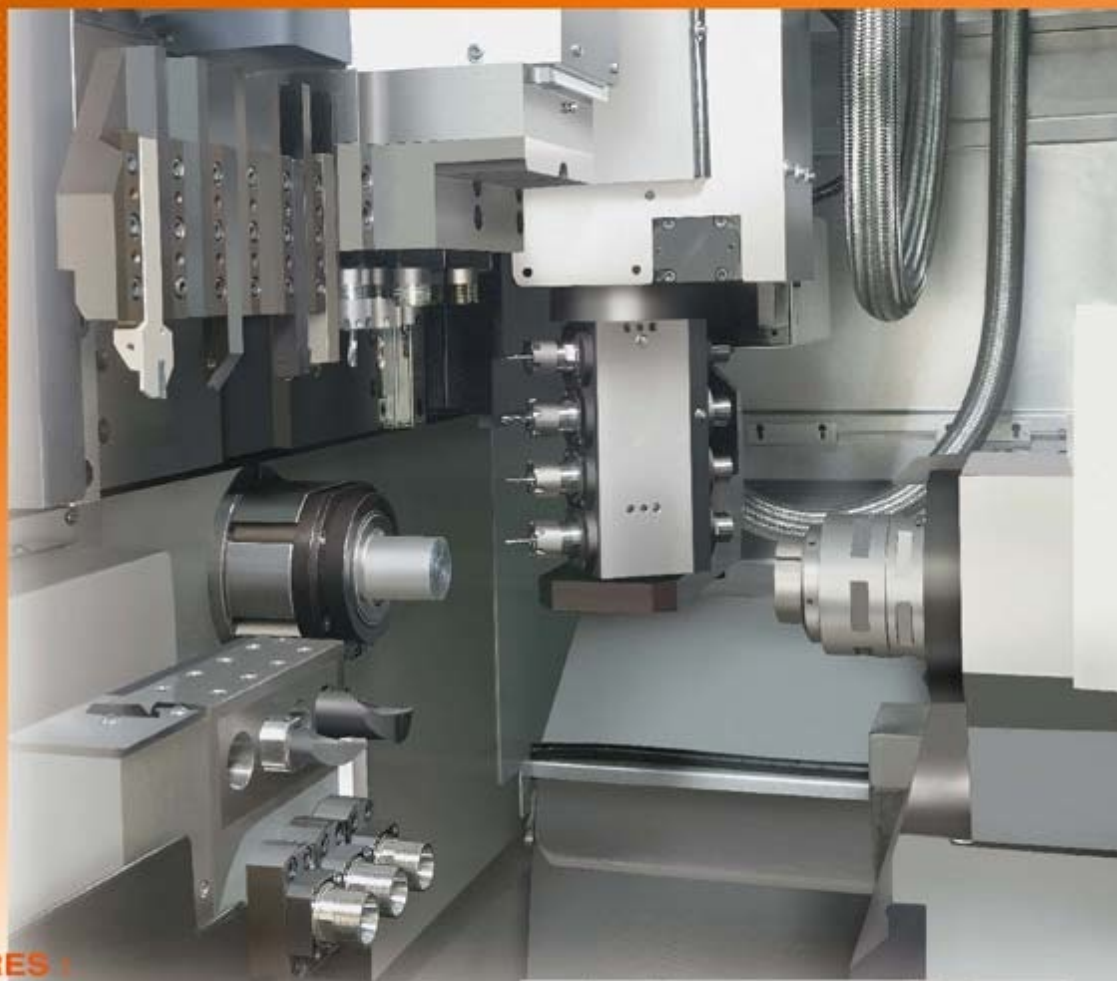
25/32/42 SERIES

SWISS TYPE CNC AUTO LATHE



走心 ● 走刀 兩用式車床

眾人引頸盼望 功能超乎想像



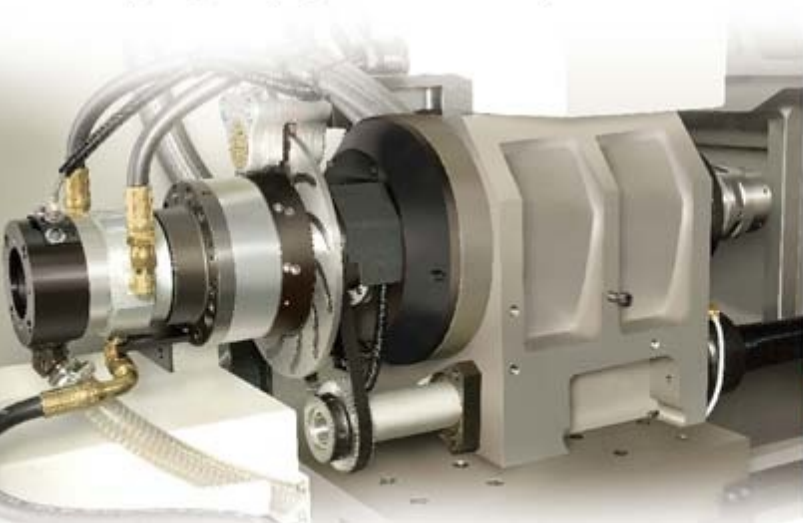
機械特點

MACHINE FEATURES :

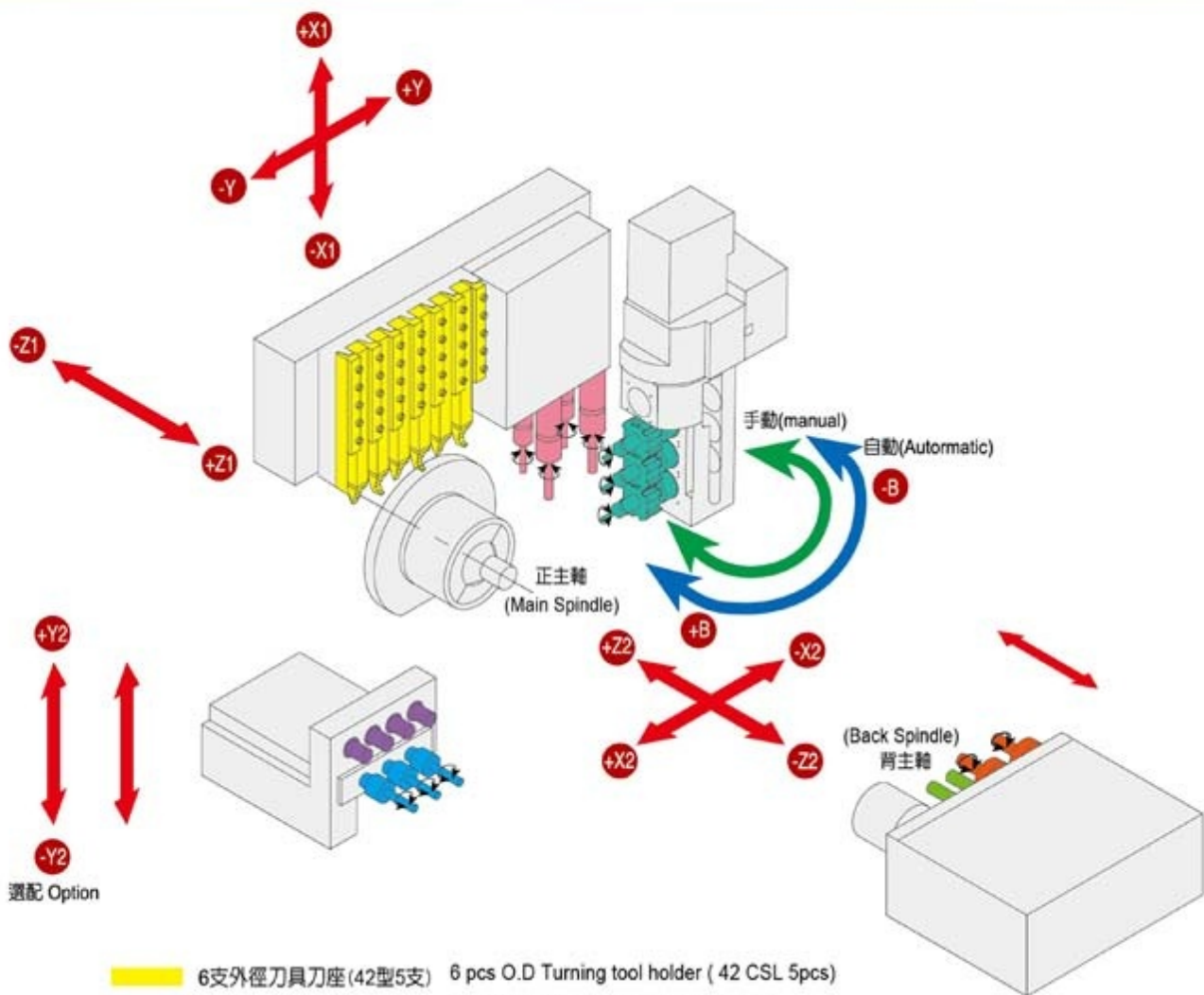
- 側銑主軸加鑽銑斜角度刀座，方便在工件側面及斜角度做鑽、銑和攻牙等功能。
- 十字型走向背主軸設計，主軸和背軸可以同時或單獨加工，節省加工時間，提供高度及多樣的前後混合加工。
- B軸鑽銑斜角度刀座可360度旋轉方便與主軸和背軸做斜角度鑽，銑和攻牙等加工。
- Cross spindle and bevel driven tool holder will help you to do drilling, milling and tapping on cross side and bevel.
- Cross travel sub-spindle design, the main and sub-spindle can work either one at a time or simultaneously for reduced machining duration. This design bring multi-function front and rear machining.
- The B-axis bevel driven tool holder can be rotated 360 degrees to facilitate bevel drilling, milling and tapping with the main and rear spindle.










- 背主軸配伺服馬達，標準是5度定位，可選配C軸。
- 背主軸旁邊刀座放置2支固定及2支動力鑽，可前進後退，適合做深孔加工。
- Sub-spindle is equipped with servo motor, and the standard is 5 degree indexing. C-axis is optional.
- There are 2 fixed and 2 power drills on the tool holder beside the sub-spindle, which can move forward and backward. It is suitable for deep hole processing.



- 主軸配內藏式馬達，標準配C軸，可選配高解析的CS軸。
- Main spindle is equipped with built-in motor, and the standard is equipped with C axis. A high-analytic CS axis is optional.



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|---|------------------|--|
|  | 6支外徑刀具刀座 (42型5支) | 6 pcs O.D Turning tool holder (42 CSL 5pcs) |
|  | 6支側銑刀具刀座 | 6 pcs Cross working driven tool holder |
|  | 3支斜角度鑽銑刀具刀座 | 3 pcs Bevel driven tool holder |
|  | 2支正面內徑刀具刀座 | 2 pcs I.D stationary tool holder |
|  | 2支正面鑽銑刀具刀座 | 2 pcs Front working driven tool holder |
|  | 4支背面內徑刀具刀座 | 4 pcs Back I.D stationary tool holder |
|  | 3支背面鑽銑刀具刀座 | 3 pcs Back working driven tool holder |

標準配件

- | | | |
|----------------------|----------|---------------------|
| ◆ 控制器: 發那科0i-TF PLUS | ◆ 冷卻系統 | ◆ 外徑刀具刀座 5~7支 |
| 發那科31i-B (選配Y2軸) | ◆ 工件切斷檢測 | ◆ 正面內徑刀具刀座— 2 / 3支 |
| ◆ 主軸C軸定位 | ◆ 同期迴轉套筒 | ◆ 側面鑽銑刀具刀座 6支 |
| ◆ 背主軸5°定位 | ◆ 工件收集器 | ◆ 背面內徑刀具刀座 4支 |
| ◆ 工作燈 | | |

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|---|---|
| ◆ Controller : Fanuc 0i-TF PLUS, Fanuc 31i-B (Opt. Y2 axis) | ◆ Live bushing |
| ◆ Main spindle C axis orientation | ◆ Part catcher |
| ◆ Back spindle 5° orientation | ◆ O.D turning tool holder 5~7pcs |
| ◆ Working light | ◆ Front I.D stationary tool holder 2 / 3pcs |
| ◆ Coolant system | ◆ Cross working driven tool holder 6pcs |
| ◆ Part off detective sensor | ◆ Back I.D stationary tool holder 4pcs |

選擇附件

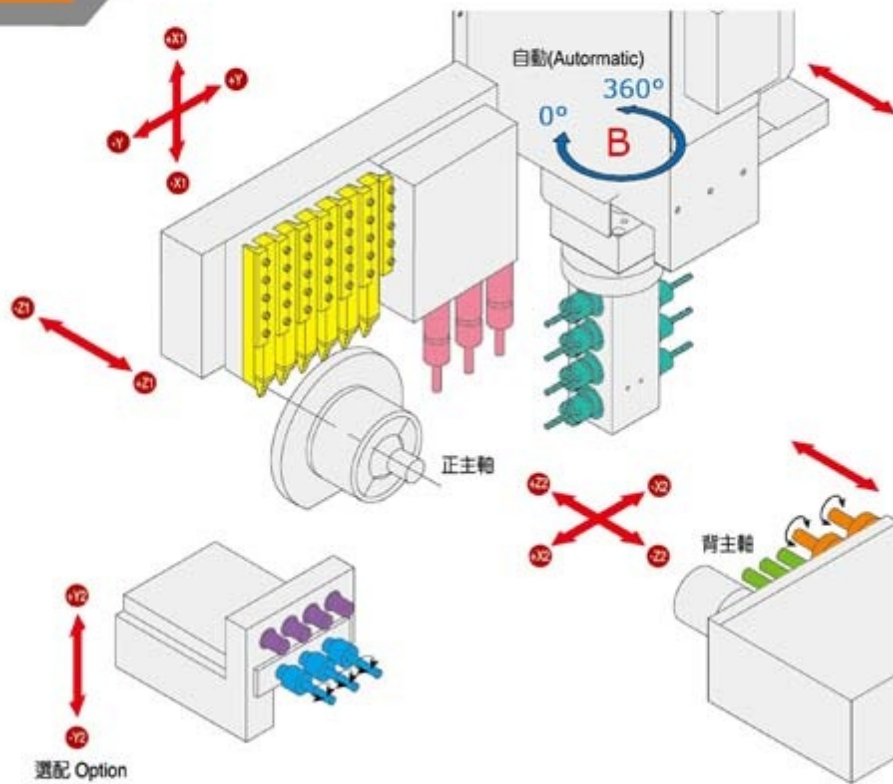
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|--------------------------|-------------------------|
| ◆ 控制器: 三菱 M80 | ◆ 粗料套筒 |
| 三菱 M830 (選配Y2軸) | ◆ CS軸(0.001°定位)..... 主軸 |
| ◆ 正面偏心鑽銑刀具刀座 2支 | ◆ C軸定位..... 背主軸 |
| ◆ 斜角度鑽銑刀具刀座 3 / 8支 | ◆ 排屑機 + 鐵屑車 |
| ◆ 背面偏心鑽銑刀具刀座 3支 | ◆ Y2軸 |

- | | |
|---|----------------------------|
| ◆ Controller : Mitsubishi M80, Mitsubishi M830 (Opt. Y2 axis) | ◆ C axis Sub-spindle |
| ◆ Front working driven tool holder 2pcs | ◆ Chip conveyor + Bucket |
| ◆ 360° b-axis bevel driven tool holder— 3/8pcs | ◆ Y2 Axis |
| ◆ Back working driven tool holder 3pcs | |
| ◆ Rough material bushing | |
| ◆ CS axis (0.001° orientation)..... Main spindle | |

機械規格 : MACHINE SPECIFICATIONS :

項目	ITEMS	金鑽 25 CSL DIAMOND 25 CSL	金鑽 32 CSL DIAMOND 32 CSL	金鑽 42 CSL DIAMOND 42 CSL	
加工範圍 Working Range	最大加工外徑	Max. Turning Dia.	Ø26mm	Ø32mm	Ø42mm
	一次開夾最大加工長度	Max. machining length per chucking	250mm	250mm	250mm
	最大鑽孔直徑	Max. Drilling Dia.	Ø26mm	Ø26mm	Ø26mm
	最大攻牙外徑	Max. Tapping Dia.	M16	M16	M16
刀具系統 Tooling System	外徑刀具數(B軸3支)	O.D.Tooling(B axis with 3 pcs)	6	6	5
	外徑刀具數(B軸8支)	O.D.Tooling(B axis with 8 pcs)	7	7	6
	外徑刀具尺寸	O.D.Tool Dimension	□16x16x120	□16x16x120	□16x16x120
	(正面)內徑刀具數 (B軸3支)	(Front) I.D. Tooling(B axis with 3 pcs)	2	2	2
	(正面)內徑刀具數 (B軸8支)	(Front) I.D. Tooling(B axis with 8 pcs)	3	3	2
	內徑刀具尺寸	Tool Dimension	13mm (ER20)	13mm (ER20)	13mm (ER20)
	(背面)內徑刀具數	(Back) I.D. Tooling	4	4	4
	內徑刀具尺寸	Tool Dimension	13mm (ER20)	13mm (ER20)	13mm (ER20)
	側銑刀具數	Cross Tooling	6	6	6
	側銑刀具尺寸	Tool Dimension	13mm (ER20)	13mm (ER20)	13mm (ER20)
	側銑刀具轉速	Speed	200~6000rpm	200~6000rpm	200~6000rpm
	(選配)斜角度鑽銑刀具數(B軸3支)	(Opt.) Bevel Drill / Mill Tooling(B axis with 3 pcs)	3	3	3
	(選配)斜角度鑽銑刀具數(B軸8支)	(Opt.) Bevel Drill / Mill Tooling(B axis with 8 pcs)	8	8	8
	斜角度鑽銑刀具尺寸	Tool Dimension	13mm (ER20)	13mm (ER20)	13mm (ER20)
	斜角度鑽銑刀具轉速	Speed	100~6000rpm	100~6000rpm	100~6000rpm
	(選配)正面鑽銑刀具數	(Opt.) Front Drilling Tooling	2	2	2
	正面鑽銑刀具尺寸	Tool Dimension	13mm (ER20)	13mm (ER20)	13mm (ER20)
	正面鑽銑刀具轉速	Speed	200~6000rpm	200~6000rpm	200~6000rpm
	(選配)背面鑽銑刀具數	(Opt.) Back Drilling Tooling	3	3	3
背面鑽銑刀具尺寸	Tool Dimension	13mm (ER20)	13mm (ER20)	13mm (ER20)	
背面鑽銑刀具轉速	Speed	100~4000rpm	100~4000rpm	100~4000rpm	
主軸 Spindle	主軸內徑	Spindle Hole Dia.	Ø26mm	Ø33mm	Ø42mm
	主軸轉速	Spindle Speed	200~7000rpm	200~7000rpm	200~5000rpm
	主軸定位	Indexing	C axis	C axis	C axis
	(選配)CS軸定位	(Opt.) CS Axis indexing	0.001°	0.001°	0.001°
背主軸 Back Spindle	背主軸內徑	Back Spindle Hole Dia.	Ø25mm	Ø33mm	Ø42mm
	背主軸轉速	Back Spindle Speed	200~6000rpm	200~6000rpm	200~5000rpm
	背主軸定位	Indexing	5°	5°	5°
	(選配)C軸定位	(Opt.) C Axis indexing	C axis	C axis	C axis
	前面出料最大長度	Max. length for front ejection	70mm	70mm	70mm
	背面加工長度	Max. workpiece projection length from the back spindle	120mm	120mm	120mm
	背面最大鑽孔直徑	Max.Back Drilling Dia.	Ø16mm	Ø16mm	Ø16mm
背面最大攻牙外徑	Max. Back Tapping Dia.	M12	M12	M12	
快速位移 Rapid Traverse	X1, Z1, Y1, X2, Z2軸	X1, Z1, Y1, X2, Z2 Axes	18 or 30 m/min	18 or 30 m/min	18 or 30 m/min
	(選配) Y2 軸	(Opt.) Y2 Axis	18 or 30 m/min	18 or 30 m/min	18 or 30 m/min
馬達 Motors	主軸馬達	Main Spindle Motor	3.7/5.5kW	3.7/5.5kW	18.5/30kW
	背軸馬達	Back Spindle Motor		2.2kW	
	X1, Z1, Y1, X2, Z2軸馬達	X1, Z1, Y1, X2, Z2 Axes Motor		1.2kW	
	(選配) Y2, B軸馬達	(Opt.) Y2, B Axes Motor		0.75kW	
	側面鑽銑馬達	Cross driven spindle Motor		2.2kW	
	(選配)斜角度鑽銑馬達 (B軸3支)	(Opt.) Bevel driven spindle Motor(B axis with 3 pcs)		1kW	
	(選配)斜角度鑽銑馬達 (B軸8支)	(Opt.) Bevel driven spindle Motor(B axis with 8 pcs)		2.2kW	
	(選配)背面鑽銑馬達	(Opt.) Back driven spindle Motor		0.75kW	
	(選配)Y2軸)背面鑽銑馬達	(Opt. Y2 Axis) Back driven spindle Motor		1kW	
	切削油馬達	Coolant Pump		0.75kw x 2	
潤滑油馬達	Lubrication		4w x 2		
機械尺寸 Machine Dimensions	主軸中心高	Center Height		960mm	
	重量	Weight	4550kg	4550kg	4650kg
	機械尺寸	Machine Size	3030x1810x1980 mm		
氣壓 Air	空氣壓力	Air Pressure	5kg/cm		
	空氣量	Air Supply	10L/min		

因長期研發・機械設計如有變更恕不另行通知・ We reserve the right to change the above design without prior notification.



7 pcs O.D turning tool holder (42CSL 6pcs)
7支外徑刀具刀座(42型6支)

6 pcs cross working driven tool holder
6支側銑刀具刀座

8 pcs 360° B axis bevel driven tool holder
8支斜角度鑽銑刀具刀座

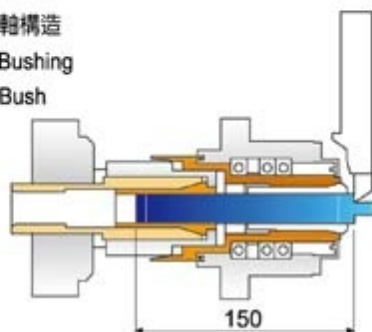
3 pcs I.D stationary tool holder (42CSL 2 pcs)
3支正面內徑刀具刀座(42型2支)

2 pcs front off-center driven tool holder
2支正面鑽銑刀具刀座

4 pcs back I.D stationary tool holder
4支背面內徑刀具刀座

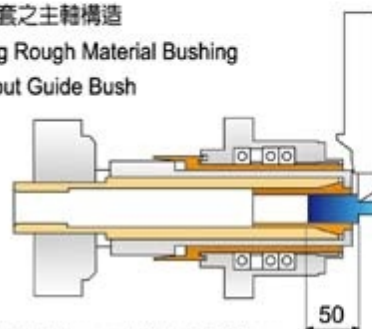
3 pcs back off-center driven tool holder
3支背面鑽銑刀具刀座

有導套之主軸構造
Using Live Bushing
with Guide Bush

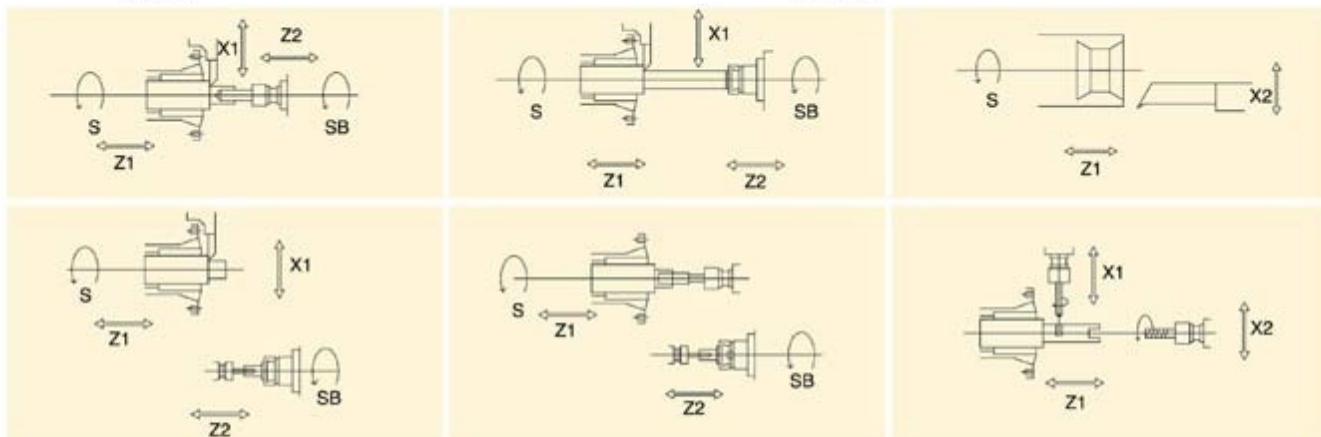


剩餘材料 Remnant Material 150 mm

無導套之主軸構造
Using Rough Material Bushing
without Guide Bush



剩餘材料 Remnant Material 50 mm



POLY GIM

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